

## **ABSTRACT**

A method and system for monitoring when chemicals in a development process need replenishing. The system comprises a reference strip bearing a developed graduated scale of exposure of a radiation sensitive medium to a range of exposures and a testing module comprising a radiation shielded pouch and an unexposed radiation sensitive medium within the pouch. The said module include a radiation filter for producing a graduated scale of a range of exposures to radiation on a test strip when it is exposed to radiation and subsequently developed. The scale on the test strip being identical to that on the reference strip when the test strip is exposed to the same radiation, and developed in a developing bath with an acceptable chemical level and composition as that used to produce the scale on the reference strip. Means are provided for comparing the scales on the reference and test strips side-by-side. The test strip and the reference strip each have a datum indicia that align when the test strip and the reference strips are in a datum position relative to each other where the scale on the test strip matches the scale on the reference strip. One or both strips have limits indicia that together define an acceptable range of variation of the graduated scales of the test strip compared with the test graduated scale of the reference strip when the test strip is moved relative to the graduated scale of the reference strip away from said datum position in a direction along the scale of the reference strip to bring a selected first region of the graduated scale of the test strip in alignment with a matching region of the graduated scale of the reference strip.